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# **Notice of Allowability**

**Application No.**

09/628,366

**Examiner**

Anthony T Ton

**Applicant(s)**

CHEKURI ET AL.

**Art Unit**

2661

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/10/2004.
2. ☒ The allowed claim(s) is/are 1-6,8 and 10-14.
3. ☒ The drawings filed on 10 April 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## **Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |



**PHIRIN SAM  
PRIMARY EXAMINER**

gm

*Allowable Subject Matter*

1. The following is an examiner's statement of reasons for allowance:

a) **In Regarding to Claims 1-6, 8, 10 and 11:** The prior arts of record fail to teach a processor-implement method for providing a desired level of performance for a wireless network, the method comprising a combination of steps of:

a multi-stage process including at least a frequency assignment stage and a post-frequency-assignment optimization state; and

the post-frequency-assignment optimization state being configured to utilize derivative-based optimization of a specified objective function in order to determine a particular network configuration for specified values of network capacity and network coverage, and wherein at least a subset of the stages of the multi-stage process are iterated.

b) **In Regarding to Claim 12:** The prior arts of record fail to teach an apparatus for use in providing a desired level of performance for a wireless network, the apparatus comprising a combination of steps of:

a multi-stage process including at least a frequency assignment stage and a post-frequency-assignment optimization state; and

the post-frequency-assignment optimization state being configured to utilize derivative-based optimization of a specified objective function in order to determine a particular network configuration for specified values of network capacity and network coverage, and wherein at least a subset of the stages of the multi-stage process are iterated.

c) **In Regarding to Claim 13:** The prior arts of record fail to teach an apparatus for use in providing a desired level of performance for a wireless network, the apparatus comprising a combination of steps of:

means for applying an optimization process comprising a multi-stage process including at least a frequency assignment stage and a post-frequency-assignment optimization state; and

the post-frequency-assignment optimization state being configured to utilize derivative-based optimization of a specified objective function in order to determine a particular network configuration for specified values of network capacity and network coverage, and wherein at least a subset of the stages of the multi-stage process are iterated.

d) **In Regarding to Claim 14:** The prior arts of record fail to teach an article of manufacture comprising a machine-readable medium for storing one or more software programs for use in providing a desired level of performance for a wireless network, wherein the one or more programs when executed by a processor-based system perform the steps of:

applying an optimization process comprising a multi-stage process including at least a frequency assignment stage and a post-frequency-assignment optimization state; and

the post-frequency-assignment optimization state being configured to utilize derivative-based optimization of a specified objective function in order to determine a particular network configuration for specified values of network capacity and network coverage, and wherein at least a subset of the stages of the multi-stage process are iterated.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Anthony T Ton** whose telephone number is **571-272-3076**. The examiner can normally be reached on M-F: 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chau Nguyen** can be reached on **571-272-3126**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

by: *Atlu*  
Anthony T. Ton  
Patent Examiner  
February 11, 2005

  
**PHIRIN SAM**  
**PRIMARY EXAMINER**